



## Data sheet for three-phase Squirrel-Cage-Motors

Totally Enclosed Fan Cooled (TEFC)

**MLFB-Ordering data:** 1LE2311-1AA31-4AA3

**Motor type:** SD100 - NEMA Premium Efficiency Plus

Client order no.:

Order no.:

Offer no.:

Remarks:

Item no.:

Consignment no.:

Project:

U [V]	$\Delta / Y$	f [Hz]	P [HP]	P [kW]	n [rpm]	I Load [Amps]					LRC	Nom. Eff Load [%]			Pwr. Factor Load [%]			Torque [lb-ft]	T <sub>A</sub> /T <sub>N</sub> LRT [%]	T <sub>k</sub> /T <sub>N</sub> BDT [%]
						4/4	3/4	1/2	0	4/4		3/4	1/2	4/4	3/4	1/2				
460	Y	60	2.00	1.50	3,550	2.60	2.10	1.70	1.20	25.0	88.5	88.0	85.0	83.0	77.0	66.0	3.0	250	500	
230	YY	60	2.00	1.50	3,550	5.20	4.15	3.34	2.40	50.0	88.5	88.0	85.0	83.0	77.0	66.0	3.0	250	500	
Frame Type 145T		Type of constr.: (A) Foot mounted - End shield				Ins. Cl.: F		Motor Prot.: (A) Without Protection				NEMA Des.: B		S.F.: 1.15						
Mtr WT: 80 lbs		Mounting: (3) F-1, Standard Floor Mount, T. Box LHS				Temp. Rise Cl.: B		Amb. Temp.: +40 to -20 °C @1000 m				kVA: L		IP55						

## Mechanical data

### WK2

Rotor Moment of Inertia:	0	Lb-ft <sup>2</sup>
Ext Load Inertia Capability:	2.4	Lb-ft <sup>2</sup>

### Safe Stall Time

Hot:	18.0	s
Cold:	26.0	s

### Typical Noise Data

A-weighted Sound		
Sound Pressure:	76.0	dB(A)
Sound Power:	64.0	dB(A)

### Octave Band Center Frequencies Hertz

	250	500	1000	2000	4000	8000	Hz
SPL@3 feet	44.0	52.0	62.0	59.0	54.0	46.0	dB(A)

### Bearings

	DE	NDE
Bearing size:	6205 Z C3 S0	6205 Z C3 S0
Bearing Type:	Ball Bearing	Ball Bearing
AFBMA:	25BC02JP30	25BC02JP30

### Grease

Capacity:	0.10	oz	0.10	oz
Type:	Exxon Mobile EM			
Thickener:	Polyurea			

### Frame

Frame material:	cast iron
Coating (paint finish):	Standard Paint
Color, paint shade:	RAL 7030

### Terminal box

Terminal box position:	(3) F-1, Standard Floor Mount, T. Box LHS
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### Lead Wire Connection

Description:	9 LEAD - WYE				
Voltage	L1	L2	L3	Connected together	
LOW	T1 T7	T2 T8	T3 T9	T4 T5 T6	Y Y
HIGH	T1	T2	T3	T4 T7-T5 T8-T6	Y
				T9	

### Ventilation Type

Type of Cooling:	TEFC
Fan Material:	Polypropylen ESD
Fan Rotation:	Bidirectional

### Additional information

VFD Operation:	CT: 4:1	VT: 20:1
Area: classification:	Class I Division 2 Gr. A, B, C or D	

## Notes

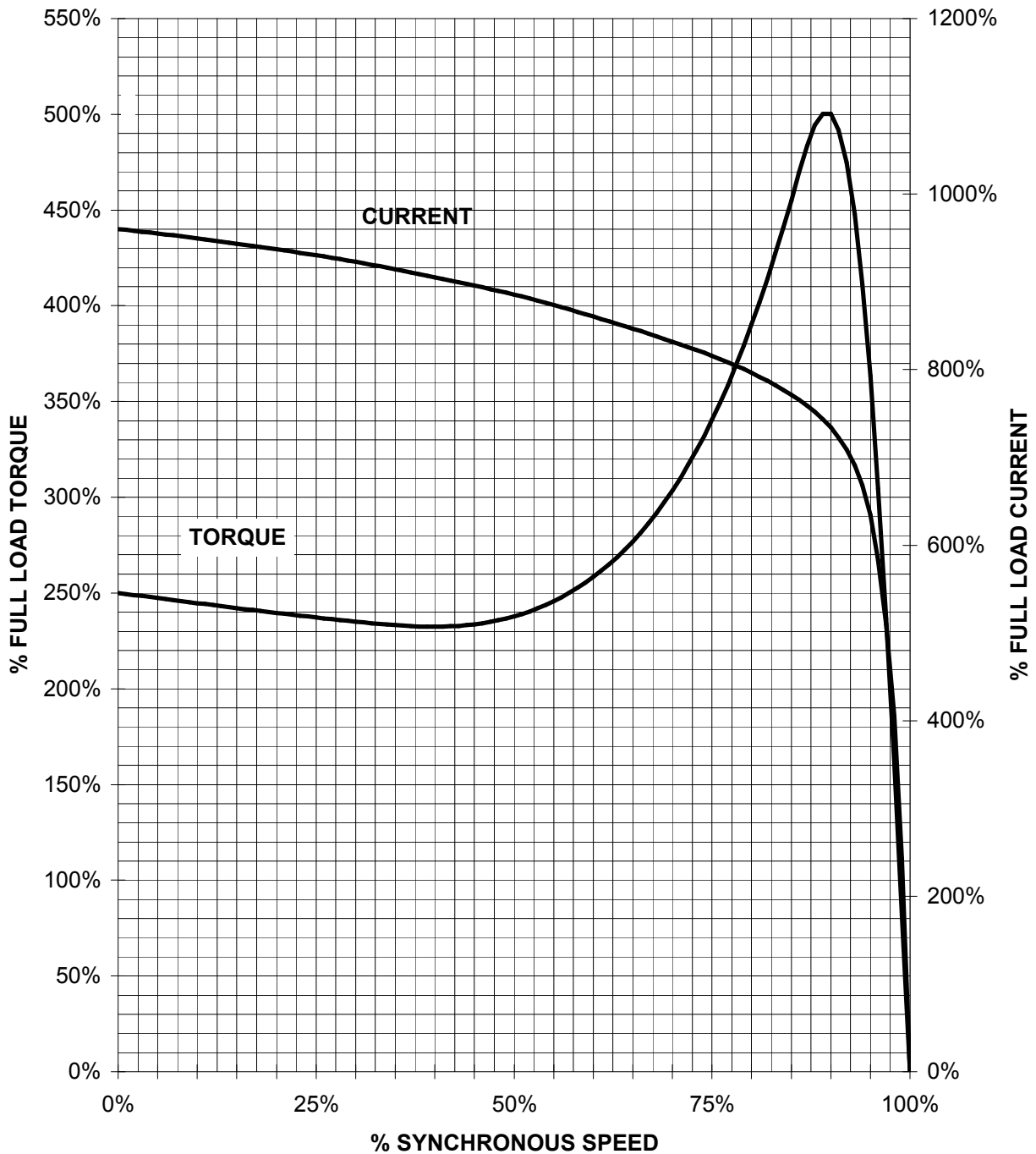
I<sub>A</sub>/I<sub>N</sub> = locked rotor current / current nominal T<sub>k</sub>/T<sub>N</sub> = break down torque / nominal torque  
 T<sub>A</sub>/T<sub>N</sub> = locked rotor torque / torque nominal <sup>1)</sup> Value is valid only for DOL operation with motor design IC411



# SIEMENS INDUSTRY, INC.

HP 2      VOLTS < 600V      RPM 3600      TYPE SD100 NPP  
HZ 60      PHASE 3      FRAME 145T      NEMA B

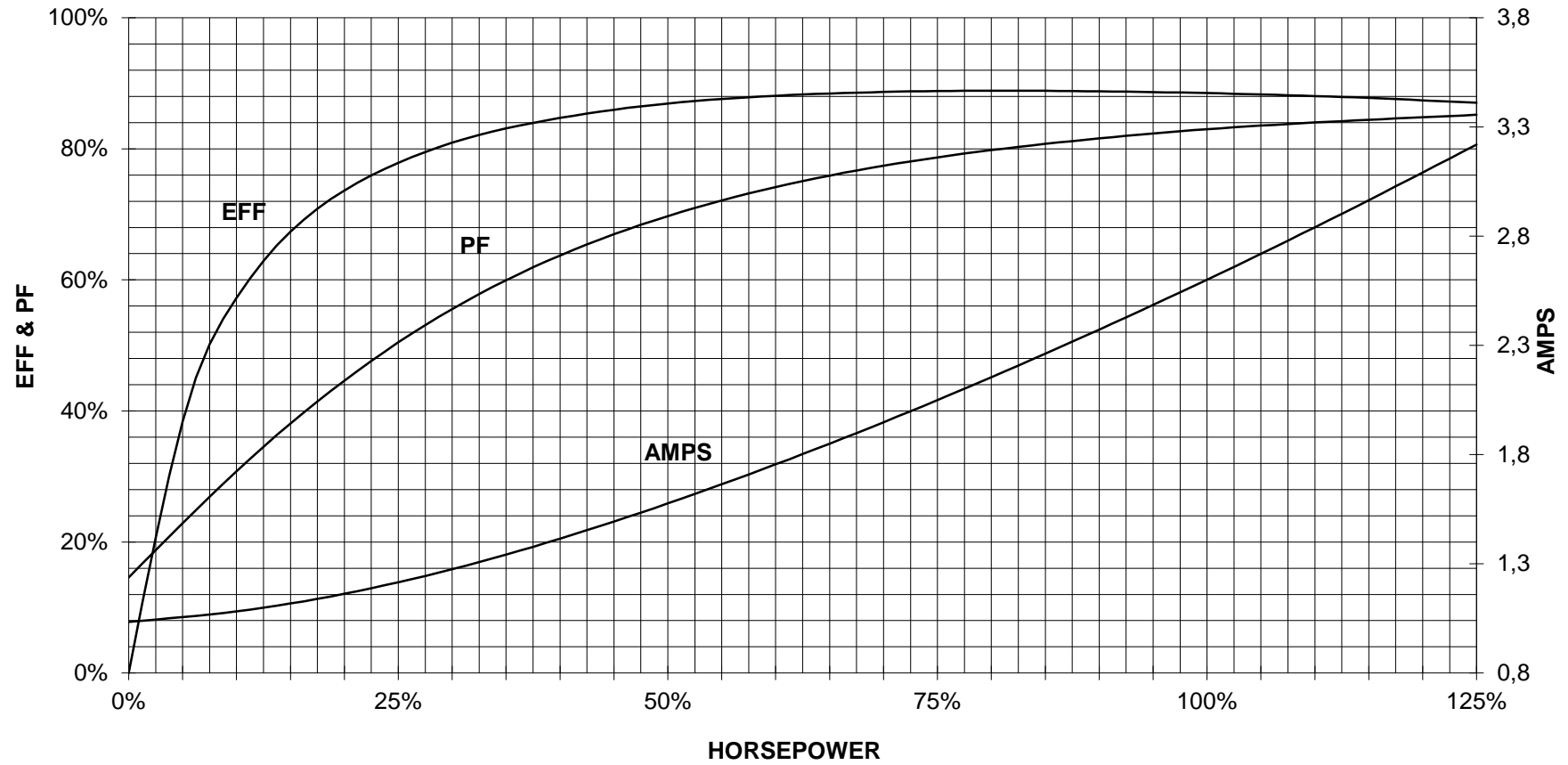
## TORQUE & CURRENT VS. SPEED



CUSTOMER: \_\_\_\_\_ ORDER#: \_\_\_\_\_

2 HP 3600 RPM 145T FRAME 460 VOLTS 3 PHASE NEMA DESIGN B

**SIEMENS INDUSTRY, INC.**  
**PERFORMANCE CURVE**  
**SD100 NPP**

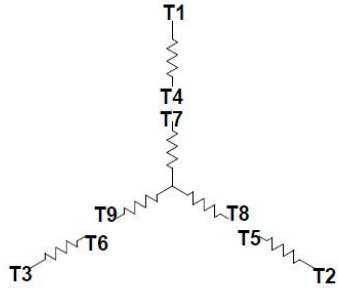


CUSTOMER \_\_\_\_\_ ORDER # \_\_\_\_\_ PO # \_\_\_\_\_

PERFORMANCE BASED ON DESIGN CALCULATIONS. SUBJECT TO CHANGE WITHOUT NOTICE.

REV. 1

Main terminal diagram



9 LEAD WYE						
Volts	LINES			CONNECTED TOGETHER	CONN.	
	L1	L2	L3			
LOW	T1 T7	T2 T6	T3 T9	T4 T5 T6	YY	
HIGH	T1	T2	T3	T4 T7-T5 T8-T6 T9	Y	

responsible dep. DI MC LVM	technical reference	created by	approved by	project
<b>SIEMENS</b>	document type Wiring Diagram	document status free		customer
	title 1LE2311-1AA31-4AA3	document number		
© Siemens AG 2019	rev. 01	creation date 12/03/2019	language en/en	Page 1/1